

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JC781 U.S. PTO
10/027923
12/21/01

In re the application of: Bates, *et al.*

Serial No.: Not Yet Assigned

Filed: Herewith (December 21, 2001)

For: *NOVEL GLUTAMATE RECEPTOR
MODULATORY PROTEINS AND NUCLEIC ACID
MOLECULES AND USES THEREFOR*

Attorney Docket No.: GNN-024

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

11/2

Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants and their Attorney are aware of the following publications and information, listed on the attached PTO Form 1449, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration. A copy of each cited publication is enclosed.

Applicants invite the Examiner's attention to the fact that the "publication date" listed for each of references A2-F1, which are printouts of electronic GenBank database records, corresponds to the date the record was first made publicly available or was subsequently revised. In the case of revised records, the accession number will often include an extension (*e.g.*, accession no.1, .2, .3, etc.) indicating the "version" of the record. Applicants have attempted to provide the version of the record as first made publicly available. Applicants invite the Examiner's attention to the fact that later versions of such electronic records may have contain additional or revised information.

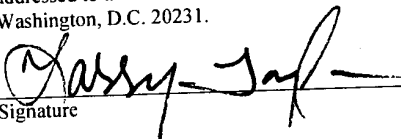
In addition, "Authors" have not been provided for the GenBank records cited in the Form PTO-1449 submitted herewith, as Applicants are unaware of the identity of any particular *person* who may have authored the GenBank records cited. The Examiner is invited to look at the printed copies of the GenBank records provided herewith, in particular, to the REFERENCE field of the database record, for the source of the

information (e.g., printed publications, direct submissions, or a combination thereof) used to create a particular record.

Applicants respectfully submit that the above information should be adequate to assist the Examiner in considering references A2-F1.

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, Applicants understand that the Examiner will make an independent evaluation of the cited publications.

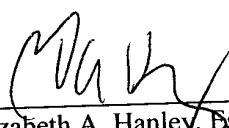
No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any necessary fees in connection with the enclosed statement to our Deposit Order Account No. 12-0080.

Express Mail" mailing label number: <u>EL 892 198 533 US</u>
Date of Deposit: <u>December 21, 2001</u>
I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.
 Signature
<u>Larry Taylor</u> Please Print Name of Person Signing

Respectfully submitted,

LAHIVE & COCKFIELD, LLP

By:


Elizabeth A. Hanley, Esq.
Registration No. 33,505 for
Debra J. Milasincic, Esq.
Registration No. 46,931
Attorney for Applicants

Date: December 21, 2001

APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO GNN-024	SERIAL NO. N/A
LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT Bates, et al.	
		FILING DATE Herewith	GROUP

10/02/92
12/21/01
US PTO
10/02/92

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
A1 WO 01/02566 A1	01/01	PCT			

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

A2	GenBank Acc. No.: 12084416 for Chain A, Crystal Structure Of Metabotropic Glutamate Receptor Subtype 1 Complexed With Glutamate (4/26/00)
A3	GenBank Acc. No.: 12084417 for Chain B, Crystal Structure Of Metabotropic Glutamate Receptor Subtype 1 Complexed With Glutamate (4/26/00)
A4	GenBank Acc. No.: 227546 for metabotropic Glu receptor (4/10/96)
A5	GenBank Acc. No.: A41939 for G protein-coupled glutamate receptor – rat (11/5/99)
A6	GenBank Acc. No.: A42916.1 for Sequence 48 from Patent WO9502701 (3/6/97)
A7	GenBank Acc. No.: AA003884.1 for mg79g07.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone IMAGE:439260 5', mRNA sequence (7/23/96)
A8	GenBank Acc. No.: AB037682.1 for Homo sapiens mRNA for testis-specific RING Finger protein, complete cds (8/1/00)
A9	GenBank Acc. No.: AB066273.1 for Oncorhynchus masou sBimR mRNA for bifunctional metabotropic receptor for extracellular calcium and glutamate, complete cds (7/20/01)
A10	GenBank Acc. No.: AF189126.1 for Ovis aries metabotropic glutamate receptor subtype 5 mRNA, partial cds (10/4/99)
Examiner	Date Considered
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	

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OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)		
B1	GenBank Acc. No.: AF227201.1 for Gallus gallus metabotropic glutamate receptor 5 splice variant a (mGluR5a) mRNA, complete cds, alternatively spliced (2/7/01)	
B2	GenBank Acc. No.: AF227202.1 for Gallus gallus metabotropic glutamate receptor 5 splice variant b (mGluR5b) mRNA, complete cds, alternatively spliced (2/7/01)	
B3	GenBank Acc. No.: AF227203.1 for Gallus gallus metabotropic glutamate receptor 5 splice variant f (mGluR5f) mRNA, complete cds, alternatively spliced (2/7/01)	
B4	GenBank Acc. No.: AF320126.1 for Mus musculus metabotropic glutamate receptor type 1 (GluR1) mRNA, complete cds (12/21/00)	
B5	GenBank Acc. No.: AI201184.1 for qf70d05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755369 3' similar to gb:Y00281 ribophorin i precursor (human);, mRNA sequence (10/14/98)	
B6	GenBank Acc. No.: AI655261.1 for wb68b11.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2310813 3' similar to sw:buty_human q13410 butyrophilin precursor ;, mRNA sequence (12/17/99)	
B7	GenBank Acc. No.: AI950429.1 for wq35d01.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2473249 3' similar to sw:buty_human q13410 butyrophilin precursor ;, mRNA sequence (3/8/00)	
B8	GenBank Acc. No.: AW015382.1 for UI-H-BI0-aat-d-06-0-UI.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2710331 3', mRNA sequence (9/10/99)	
B9	GenBank Acc. No.: AW197327.1 for xm38e06.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2686498 3' similar to sw:ro52_human p19474 52 kd ro protein ;, mna sequence (11/29/99)	
B10	GenBank Acc. No.: AX068372.1 for Sequence 7 from Patent WO0102566 (1/25/01)	
B11	GenBank Acc. No.: BAA05891.1 for metabotropic glutamate receptor subtype 5a (mGluR5a) [Homo sapiens] (2/7/99)	
B12	GenBank Acc. No.: BAA05892.1 for Metabotropic Glutamate Receptor Subtype 5b (mGluR5b) [Homo sapiens] (2/7/99)	
B13	GenBank Acc. No.: BB625841.1 for BB625841 RIKEN full-length enriched, adult male diencephalon Mus musculus cDNA clone 9330131M01 5', mRNA sequence (8/31/01)	
B14	GenBank Acc. No.: BC001862.1 for Homo sapiens, clone MGC:4827 IMAGE:3603763, mRNA, complete cds (7/12/01)	
Examiner		Date Considered
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>		

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OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

C1	GenBank Acc. No.: BC005014.1 for Homo sapiens, Similar to ring finger protein 18, clone MGC:10977 IMAGE:3635781, mRNA, complete cds (3/28/01)
C2	GenBank Acc. No.: BC015353.1 for Homo sapiens, clone MGC:21446 IMAGE:3445177, mRNA, complete cds (10/4/01)
C3	GenBank Acc. No.: BE071193.1 for RC5-BT0503-081299-011-h01 BT0503 Homo sapiens cDNA, mRNA sequence (6/9/00)
C4	GenBank Acc. No.: BE275390.1 for 601122276F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346242 5', mRNA sequence (7/13/00)
C5	GenBank Acc. No.: BE467477.1 for hz66d08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3212943 3' similar to sw:mgr5_human p41594 metabotropic glutamate receptor 5 precursor. ; mRNA sequence (7/27/00)
C6	GenBank Acc. No.: BE674422.1 for 7e01a04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3281166 3' similar to sw:mgr5_human p41594 metabotropic glutamate receptor 5 precursor. ; mRNA sequence (9/8/00)
C7	GenBank Acc. No.: BE893553.1 for 601438128F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922998 5', mRNA sequence (10/20/00)
C8	GenBank Acc. No.: BF125311.1 for 601762484F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4025516 5', mRNA sequence (10/24/00)
C9	GenBank Acc. No.: BG150163.1 for nad46b03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3368404 3' similar to sw:mgr5_human p41594 metabotropic glutamate receptor 5 precursor. [1] ; mRNA sequence (2/5/01)
C10	GenBank Acc. No.: BG193349.1 for RST12477 Athersys RAGE Library Homo sapiens cDNA, mRNA sequence (4/21/01)
C11	GenBank Acc. No.: BG199987.1 for RST19284 Athersys RAGE Library Homo sapiens cDNA, mRNA sequence (4/21/01)
C12	GenBank Acc. No.: BG335390.1 for 602404035F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:4541577 5', mRNA sequence (2/27/01)
C13	GenBank Acc. No.: BG695213.1 for NISC_iv13g09.w1 Soares NMBP2 pituitary Mus musculus cDNA clone IMAGE:4317880 5', mRNA sequence (5/4/01)
C14	GenBank Acc. No.: BI093942.1 for 602857839F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:4999112 5', mRNA sequence (6/20/01)
C15	GenBank Acc. No.: BI826234.1 for 603075928F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5167902 5', mRNA sequence (10/4/01)
C16	GenBank Acc. No.: BI858637.1 for 603388908F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:5398129 5', mRNA sequence (10/10/01)
C17	GenBank Acc. No.: D10891.1 for Rattus norvegicus mRNA for metabotropic glutamate receptor mGluR5, complete cds (2/3/99)
C18	GenBank Acc. No.: D28538.1 for Human mRNA for metabotropic glutamate receptor subtype 5a, complete cds (2/7/99)
C19	GenBank Acc. No.: D28539.1 for Human mRNA for metabotropic glutamate receptor subtype 5b, complete cds (2/7/99)
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OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

	D1	GenBank Acc. No.: F05449 for Homo sapiens cDNA clone c-0bc11, mRNA sequence (2/14/95)
	D2	GenBank Acc. No.: JC2131 for metabotropic glutamate receptor 5 B – human (1/5/96)
	D3	GenBank Acc. No.: JC2132 for metabotropic glutamate receptor 5 A – human (1/5/96)
	D4	GenBank Acc. No.: L76627.1 for Homo sapiens metabotropic glutamate receptor 1 alpha (mGluR1alpha) mRNA, complete cds (8/1/96)
	D5	GenBank Acc. No.: L76631.1 for Homo sapiens metabotropic glutamate receptor 1 beta (mGluR1beta) mRNA, complete cds (8/1/96)
	D6	GenBank Acc. No.: M61099.1 for Rat metabotropic glutamate receptor (MGLUR1) mRNA, complete cds (7/1/94)
	D7	GenBank Acc. No.: NM_000838.1 for Homo sapiens glutamate receptor, metabotropic 1 (GRM1), mRNA (3/19/99)
	D8	GenBank Acc. No.: NM_000842.1 for Homo sapiens glutamate receptor, metabotropic 5 (GRM5), mRNA (3/19/99)
	D9	GenBank Acc. No.: NM_017011.1 for Rattus norvegicus Glutamate receptor, metabotropic 1 (Grm1), mRNA (6/8/00)
	D10	GenBank Acc. No.: NM_017012.1 for Rattus norvegicus Glutamate receptor, metabotropic 5 (Grm5), mRNA (6/8/00)
	D11	GenBank Acc. No.: NM_020358.1 for Homo sapiens ring finger protein 18 (RNF18), mRNA (9/5/00)
	D12	GenBank Acc. No.: NM_024114.1 for Homo sapiens hypothetical protein MGC4827 (MGC4827), mRNA (2/27/01)
	D13	GenBank Acc. No.: NM_032681.1 for Homo sapiens hypothetical protein MGC10977 (MGC10977), mRNA (5/30/01)
	D14	GenBank Acc. No.: P23385 for metabotropic glutamate receptor 1 precursor (5/1/92)
	D15	GenBank Acc. No.: P31424 for metabotropic glutamate receptor 5 precursor (7/1/93)
	D16	GenBank Acc. No.: P41594 for metabotropic glutamate receptor 5 precursor (10/1/00)
	D17	GenBank Acc. No.: Q13255 for metabotropic glutamate receptor 1 precursor (2/1/97)
	D18	GenBank Acc. No.: S71376 for Homo sapiens sepiapterin reductase mRNA, partial cds (5/1/98)
	D19	GenBank Acc. No.: T78107.1 for yc98a01.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:23998 5' similar to sp:jc2132 jc2132 metabotropic glutamate receptor 5 a - ;, mRNA sequence (3/7/95)
	D20	GenBank Acc. No.: U31215.1 for Human metabotropic glutamate receptor 1 alpha (mGluR1alpha) mRNA, complete cds (2/16/96)
	D21	GenBank Acc. No.: U31216.1 for Human metabotropic glutamate receptor 1 beta (mGluR1beta) mRNA, complete cds (2/16/96)
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E1	GenBank Acc. No.: U73642.1 for Human Chromosome 11 Cosmid cSRL30h11, complete sequence (7/25/97)		
E2	GenBank Acc. No.: U73646.1 for Human Chromosome 11 Cosmid cSRL47b8, complete sequence (7/25/97)		
E3	GenBank Acc. No.: X57569.1 for Rat mRNA for metabotropic glutamate receptor (6/17/91)		
E4	GenBank Acc. No.: XM_004077.1 for Homo sapiens glutamate receptor, metabotropic 1 (GRM1), mRNA (11/16/00)		
E5	GenBank Acc. No.: XM_011959.1 for Homo sapiens similar to glutamate receptor, metabotropic 5 (H. sapiens) (LOC131484), mRNA (2/10/01)		
E6	GenBank Acc. No.: XM_012034.1 for Homo sapiens similar to ring finger protein 18; testis-specific RING Finger protein (LOC115618), mRNA (2/10/01)		
E7	GenBank Acc. No.: XM_015378.1 for Homo sapiens similar to ring finger protein 18; testis-specific RING Finger protein (H. sapiens) (LOC120152), mRNA (4/16/01)		
E8	GenBank Acc. No.: XM_015445.1 for Homo sapiens hypothetical gene supported by BC001862; NM_024114 (LOC96340), mRNA (4/16/01)		
E9	GenBank Acc. No.: XM_016444.1 for Homo sapiens similar to ring finger protein 18; testis-specific RING Finger protein (LOC85649), mRNA (4/16/01)		
E10	GenBank Acc. No.: XM_017350.1 for Homo sapiens similar to hypothetical protein MGC4827 (LOC95210), mRNA (4/16/01)		
E11	GenBank Acc. No.: XM_027090.1 for Homo sapiens similar to hypothetical protein MGC10977 (LOC95209), mRNA (7/16/01)		
E12	GenBank Acc. No.: XM_031348.1 for Homo sapiens glutamate receptor, metabotropic 5 (GRM5), mRNA (7/16/01)		
E13	GenBank Acc. No.: XM_042199.1 for Homo sapiens similar to hypothetical protein MGC10977 (LOC96339), mRNA (7/16/01)		
E14	GenBank Acc. No.: XM_046292.1 for Homo sapiens similar to hypothetical protein MGC10977 (H. sapiens) (LOC120552), mRNA (7/16/01)		
E15	GenBank Acc. No.: XM_047824.1 for Homo sapiens glutamate receptor, metabotropic 1 (GRM1), mRNA (7/16/01)		
E16	GenBank Acc. No.: XM_049879.1 for Homo sapiens similar to hypothetical protein MGC10977 (LOC94890), mRNA (7/16/01)		
E17	GenBank Acc. No.: XM_053475.1 for Homo sapiens ring finger protein 18 (RNF18), mRNA (8/27/01)		
E18	GenBank Acc. No.: XM_054004.1 for Homo sapiens glutamate receptor, metabotropic 1 (GRM1), mRNA (8/27/01)		
E19	GenBank Acc. No.: XM_057673.1 for Homo sapiens glutamate receptor, metabotropic 1 (GRM1), mRNA (10/16/01)		
<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Examiner</td> <td style="width: 50%;">Date Considered</td> </tr> </table>		Examiner	Date Considered
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